REMARKS

Claims 10-22 and 33-51 are pending. Claim 40 is rejected under 35 U.S.C. §102(e). Claims 10-22, 33-39, and 41-51 are rejected under 35 U.S.C. §103(a). Claims 1-9 and 23-32 are cancelled without prejudice.

Claim 40 is rejected under 35 U.S.C. §102(e) as being anticipated by Osthoff et al. (U.S. Pat. No. 6,126,310). Claim 40 recites "A method of communicating data from a transmitting end to a receiving end, comprising: the receiving end receiving from the transmitting end a first transmission including original data bits and Cyclical Redundancy Check (CRC) bits without parity bits produced at the transmitting end by operation of an encoding algorithm applied to the original data bits; **the receiving end determining whether the original data bits have been received correctly in response to the CRC bits** and, responsive to a determination that the original data bits have not been received correctly, the receiving end transmitting to the transmitting end a request for transmission of the parity bits." (emphasis added).

Examiner cites col. 2, lines 1-12 of Osthoff et al. as disclosing "a first transmission including original data bits and Cyclical Redundancy Check (CRC) bits." Examiner further cites col. 8, lines 31-47 and 48-60 as disclosing "responsive to a determination that the original data bits have not been received correctly, the receiving end transmitting to the transmitting end a request for transmission of the parity bits." However, Examiner fails to find any disclosure of the foregoing emphasized limitation. In fact, Examiner even omits this limitation from the claim summary in the instant Office Action. Applicants respectfully submit that Osthoff et al. DO NOT disclose "the receiving end determining whether the original data bits have been received correctly in response to the CRC bits" as required by claim 40. Thus, claim 40 is patentable under 35 U.S.C. §102(e) over Osthoff et al. Moreover, claim 41 is patentable as depending from patentable claim 40.

Applicants respectfully offer the following comments on Examiner's errors in the instant Office Action.

1) Examiner mistakenly combines the citation from col. 2, lines 1-12 of Osthoff et al. with the citation from col. 8, lines 31-47 and 48-60. Osthoff et al. DO NOT disclose "the receiving end determining whether the original data bits have been received correctly in response to the CRC bits" as required by claim 40. The two citations are unrelated.

2) Examiner mistakenly concludes "Osthoff also discloses as shown in fig. 1a, receiver comprises an error check means **(cyclic error check)** ECM which performs an error check algorithm on the original or multiple corrected information bits IB stored in the register (buffer) IB-R." Osthoff et al. DO NOT disclose that the ECM performs a "cyclic error check" or that it even receives CRC bits. These are Examiner's words and not a part of the disclosure of Osthoff et al.

3) Examiner errs in stating that "Even parity is a special case of a cyclic redundancy check (CRC)." Once again, these are Examiner's words and not a part of the disclosure of Osthoff et al. In fact, Osthoff et al. specifically differentiate between CRC bits of the prior art (col. 2, lines 6-14) and parity bits (col. 8, lines 31-47 and 48-60). Osthoff et al., therefore, specifically disagree with Examiner.

Independent claims 10 and 16 are rejected as unpatentable under 35 U.S.C. §103(a) over Osthoff et al. (U.S. Pat. No. 6,126,310) in view of Lockhart et al. (U.S. Pat. No. 6,161,207). Independent claim 10 recites "A data communication apparatus, comprising: an input for receiving original data bits that are to be transmitted via a communication channel to another data communication apparatus; an encoder coupled to said input for applying to the original data bits an encoding algorithm that produces parity bits; an output for providing bits that are to be transmitted across the communication channel; and a data path coupled between said encoder and said output, said data path receiving information from said another data communication apparatus, said data path **selecting one of the original data bits with Cyclical Redundancy Check (CRC) bits and the parity bits in response to a first information**, said data path **selecting the other of the original data bits with CRC bits and the parity bits in response to**

a second information, to be provided to said output for transmission across the communication channel to said another data communication apparatus." (emphasis added). Independent claim 16 includes similar limitations.

Examiner, in the instant Office Action, still refers to "overhead bits," which are not found in any of the claims. The foregoing emphasized limitations are explained in detail at paragraph [0066] with reference to Figure 12 of U.S. Pub. No. 2003/0206561. As previously discussed with regard to claim 40, neither Osthoff et al. nor Lockhart et al. disclose these features of the claimed invention. Furthermore, Examiner provides several citations from Lockhart et al. but fails to identify 1) a data path, 2) a first information, 3) a second information, 4) transmission of original data bits with CRC bits in response to one of first or second information, or 5) transmission of parity bits in response to the other of first or second information. Applicants respectfully request clarification of these omitted claim limitations. For all the foregoing reasons, therefore, claims 10-22 are patentable under 35 U.S.C. §103(a).

Independent claims 33, 42, and 46 are rejected as unpatentable under 35 U.S.C. §103(a) over Rogard et al. (U.S. Pat. No. 4,718,066) in view of Osthoff et al. (U.S. Pat. No. 6,126,310). Claim 33 recites "A method of communicating data from a transmitting end to a receiving end, comprising: the transmitting end applying to a plurality of original data bits that are to be transmitted to the receiving end an encoding algorithm that produces Cyclical Redundancy Check (CRC) bits and parity bits; **the transmitting end transmitting the original data bits and the CRC bits without the parity bits in a first transmission** to the receiving end; and **the transmitting end refraining from transmitting the parity bits until the transmitting end receives an indication from the receiving end that the original data bits have not been correctly received** at the receiving end." (emphasis added). Claims 42 and 46 include limitations similar to the foregoing emphasized limitations.

Examiner admits that Rogard does not disclose the foregoing emphasized limitations in the instant Office Action and relies on Osthoff et al. for these claim limitations. Osthoff et al., however,

fail to disclose the foregoing limitations as previously discussed with regard to claim 40. Thus, claims 33-39 and 42-51 are patentable under 35 U.S.C. §103(a)

In view of the foregoing, applicants respectfully request reconsideration of claims 10-22 and allowance of claims 10-22 and 33-51. If Examiner finds any issue that is unresolved, please call applicants' attorney by dialing the telephone number printed below.

Respectfully submitted,

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